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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/801,400 | 03/07/2001 | Harald Bock | 112740-191 | 4054 |
| 29177 | 7590 | 06/01/2005 | EXAMINER | |
| BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135 | | | SEDIGHIAN, REZA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2633 | |

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,400

Applicant(s)

HARALD BOCK ET AL.

Examiner

M. R. Sedighian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

1. This communication is responsive to applicant's 3/17/05 amendments and remarks in the application of Bock Haraled filed 3/7/01. The amendments have been entered. Claims 1-3 and 5-7 are now pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent No: 6,181,849).

Regarding claim 1, Lin teaches a system for suppressing oscillating instabilities in an optical wavelength division multiplex ring network (col. 1, lines 1-14, 53-64 and fig. 1), comprising: a wavelength demultiplexer filter device inserted in an optical fiber of the ring network (col. 1, lines 55-64 and fig. 1) for demultiplexing a wavelength division multiplex signal into individual optical signals (col. 1, lines 38-41), wherein the filter device has a low stop-band attenuation only for individual optical signals which are in transmission channels, and further having a high stop-band attenuation outside the transmission channels (col. 1, lines 40-45), and a multiplexer filter device for combining the individual signals into a wavelength division multiplex signal (col. 1, lines 44-46). Lin differs from the claimed invention in that Lin does not specifically disclose filtering instabilities. However, Lin discloses a particular passband permits passage of one or more particular wavelengths along a respective optical path and substantial exclusion of others (col. 1, lines 40-45). Accordingly, the WDM transmission system of Lin can

reject or suppress unwanted signals such as oscillating instabilities. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention that an optical WDM transmission system with a particular passband or filtering such as the one of Lin can suppress oscillating instabilities or unwanted signals or noise.

Regarding claim 2, Lin teaches the passage of one or more particular wavelengths (col. 1, lines 41-43, a first filter device) and to combine various wavelengths into one multichannel optical signal on one optical path (col. 1, lines 45-48, a second filter device). Specification of the present application describes (Spec, Page 2, lines 16-17) the first filter device is a wavelength division demultiplexer, and the second filter device is a wavelength division multiplexer. Likewise, Lin teaches (col. 1, lines 43-49) a wavelength division demultiplexer (a first filter device) and a wavelength division multiplexer (a second filter device).

Regarding claim 5, Lin teaches the system can be provided in a network node of a ring network (col. 1, lines 53-64).

Regarding claim 6, Lin teaches the system can be provided in a 10 network node of the ring network and is designed as an add-drop device (col. 1, lines 52, 62-64).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent No: 6,181,849) in view of Strasser et al. (US Patent No: 5,850,302), or Henmi (US Patent No: 6,137,603).

Regarding claim 3, Lin differs from the claimed invention in that Lin does not disclose a Bulk filter, or an AWG filter. Strasser teaches a Bulk filter (col. 6, lines 52-55). Henmi teaches an AWG add-drop filter (col. 1, lines 26-31). Therefore, it would have been obvious to a person

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of ordinary skill in the art at the time of invention to incorporate an optical Bulk filter such as the one of Strasser, or an AWG filter such as the one of Henmi, for the particular passband or optical filtering in the add/drop WDM transmission system of Lin in order to provide a filter that is easily customized and that is readily adaptable to a wide range of applications and that can reduce crosstalk between adjacent channels.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent No: 6,181,849) in view of Sugaya et al. (US Patent No: 6,292,289).

Regarding claim 7, Lin differs from the claimed invention in that Lin does not disclose a wavelength range of 1.53 μ m to 1.565 μ m. Sugaya teaches an optical WDM transmission system (2, 8, fig. 2), wherein optical signal ranges of 1.53 μ m to 1.565 μ m can be transmitted (col. 2, lines 44-55). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate an optical transmission system that generate optical signals in the range of 1.53 μ m to 1.565 μ m such as the one of Sugaya for the signal light transmission system of Lin in order to transmit, add, drop, and multiplex a plurality of channels of different wavelengths.

6. Applicant's arguments filed 3/17/05 have been fully considered but they are not persuasive.

Remark states Lin does not disclose a wavelength demultiplexer filter device having a low stop-band attenuation only for individual optical signals which are in transmission channels, and further having a high stop-band attenuation outside the transmission channels for a

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wavelength range containing oscillating instabilities. Lin teaches a WDM optical network can be used to divide wavelengths of incoming light from a multichannel optical signal or to combine various wavelengths on respective optical paths into one multichannel optical signal on one optical path (col. 1, lines 44-47). Lin further teaches in general a WDM is usually a passive optical network with multiple optical paths each of which exhibits a particular passband similar to an electrical signal processing filter, wherein the passband permits passage of one or more particular wavelengths along the respective optical path, to the substantial exclusion of others (col. 1, lines 38-44). Accordingly, Lin discloses a demultiplexer filter device having a low stop-band attenuation for optical signals that are transmission channels, and having a high stop-band attenuation outside the transmission channels. As to oscillating instabilities occurring outside the transmission range, Lin discloses a particular passband permits passage of one or more particular wavelengths and substantial exclusion of others (col. 1, lines 40-45). Accordingly, the WDM transmission system of Lin can reject or suppress unwanted signals such as oscillating instabilities occurring outside the transmission range. Applicant's attention is directed that during the prosecution of a pending patent application the terms found in the claims should be given the broadest reasonable interpretation, *See in re Pearson*, 181 USPQ 641 (CCPA 1974).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


M. R. SEDIGHIAN
PRIMARY EXAMINEE